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TRAINING OPPORTUNITIES FOR HAZARDOUS MATERIALS
EMERGENCY RESPONSE PERSONNEL

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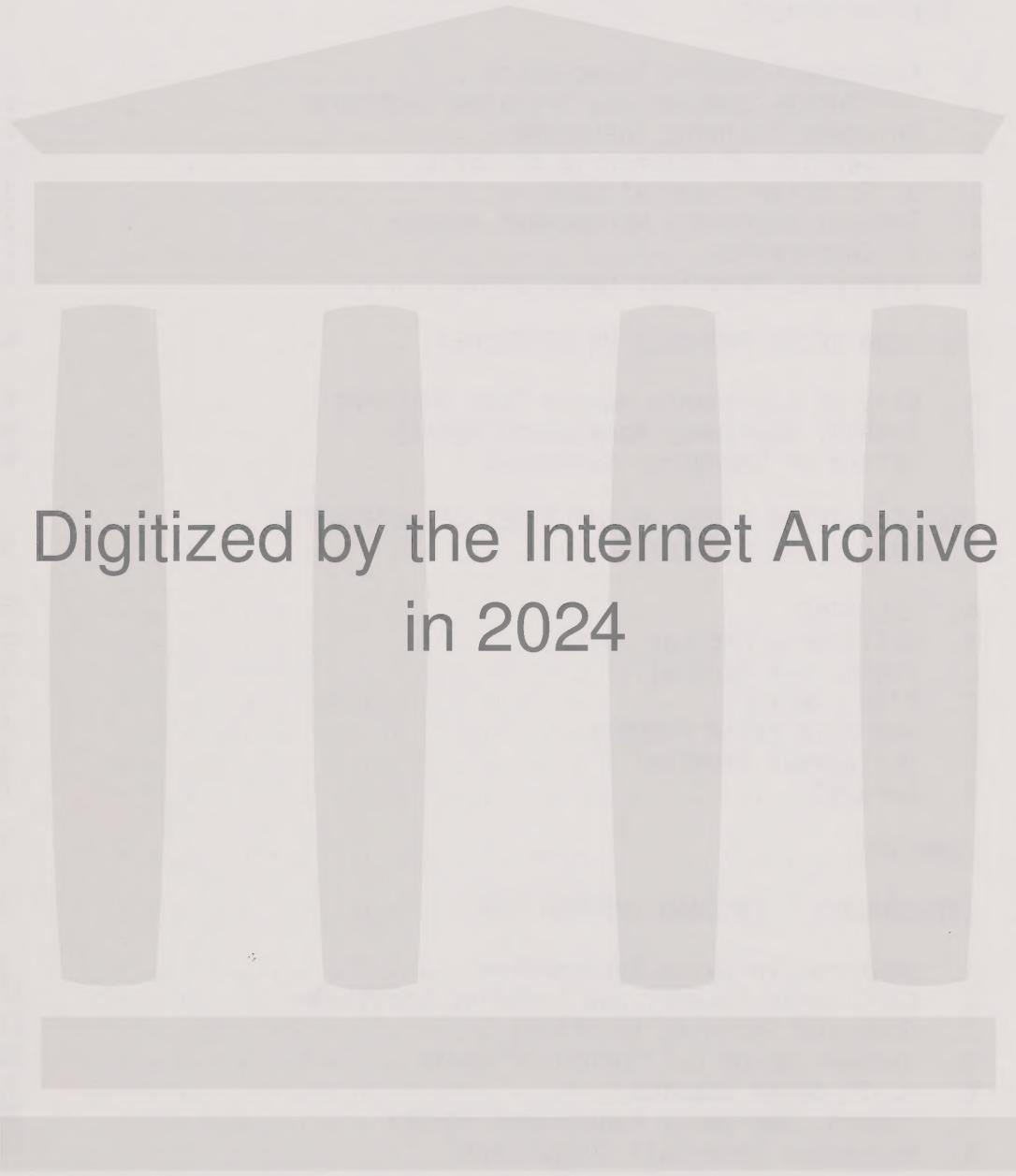


Sacramento Area Council of Governments

Suite 300, 800 "H" Street Sacramento, California 95814

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TRAINING OPPORTUNITIES FOR HAZARDOUS MATERIAL EMERGENCY RESPONSE PERSONNEL

1. Introduction

Public concern and awareness about hazardous and toxic materials and the effects on the environment have increased greatly over the last few years. The major concern revolves around the potential contamination of the environment and associated health hazards from a spill, explosion, or fire involving toxic materials.

Those responding to these incidents must be properly trained and equipped to counter the threat posed by the incident. Improper action by emergency response personnel can cause the situation to do for more damage than if no action was taken. The potential dangers to the public and environment can be greatly reduced by properly trained emergency response personnel.

In general, emergency response training involves three broad areas:

- A. Material Identification: Is the material toxic? If so, or if unknown, who should be called for assistance?
- B. Incident Containment: Keeping the spill or fire from spreading and evacuating the area if needed.
- C. Treating the situation: Can water be used on the material? How is the material cleaned up safely?

Properly trained emergency response personnel will know what actions need to be taken in each area in order to safely control each situation.

The purpose of this report is to provide information on the types of training currently available, the location of the training and the cost of the training.

2. Training Open to Employees of Cities and Counties, and the Public

- A. American Trucking Association: The Operation Council (TOC) of the American Trucking Association located in Washington D.C., has developed a series of audio-visual presentations concerning the transportation of toxic materials. The program consists of ten modules covering a wide variety of subjects including: Labeling, marking, EPA/DOT paperwork requirements, and placarding. The total program is available for purchase from TOC for \$325.

TOC also sponsors one day seminars to discuss specific areas of concern about transporting materials. The seminars are held at

locations throughout the country. Attendees normally discuss several areas, such as: Packaging, labeling, shipping papers and the interface between DOT and EPA regulations. Registration fee is \$115 per person.

Program information is Attachment A. Further information is available from TOC at (202) 797-5437.

B. California Specialized Training Institute: The Institute, located in San Luis Obispo, conducts Civil Emergency Management Courses several times during the year. The courses of particular interest are HM 82 Hazardous Materials and NB 82 Nuclear Incident/Accident. The courses address specific areas of interest regarding special management aspects of handling the emergency situation. Participants also have the opportunity to participate in a real-time, role-playing exercise in a toxic material situation. Each course lasts 44 hours and is presented over a 5 day period at a cost of \$100-200 per student.

Program information is Attachment B. More information can be obtained from the Institute at (805) 544-7101.

C. Colorado Training Institute (CTI): CTI, which is located in Denver, Colorado, presents five programs concerning toxic materials with each program offered several times per year. The programs are described below:

- 1) Hazardous Material Awareness: This three day program discusses many of the basics that any individual involved in public safety would be interested. Topics include: first aid, explosives, shipping papers, pesticides, and tactics of firefighting. Program cost: \$50.
- 2) Hazardous Material in Depth: This ten day program is an intensive in-depth look at hazardous materials. Topics include: spills, radioactive materials, protective equipment, containers and industrial chemicals. Program cost: \$400.
- 3) Commercial Vehicle Inspection: This four day seminar discusses private industry compliance with commercial vehicle laws. Subjects discussed include: Truck weights, inspection forms, inspection team exercises, log books, and driver qualifications. Program cost: \$160.
- 4) Shippers and Carriers: This five day seminar discusses the requirements for safely shipping hazardous materials. Subjects discussed include: Code of Federal Regulations, shipping papers, reports, containment, and loading materials for shipment. Program cost: \$200.
- 5) Cargo Tank Compliance/Inspection: This five day program covers every aspect of cargo tanks and preventive maintenance. Subjects dis-

cussed include: Product characteristics, insurance/liability, record keeping, and inspection procedures. Program cost: \$200.

Program information is Attachment C. More information can be obtained from CTI at (303) 289-4891.

D. University of California at Davis: UCD is sponsoring several one/two day seminars concerning aspects of toxic materials. Subjects to be discussed include: chemicals of current interest, ground-water and pesticides, motor carrier safety, and hazardous waste management. The seminars are conducted throughout the year and vary in cost from \$40 - \$125. Program information is Attachment D. Further information is available from Yvonne Hunter at (916) 752-6572.

E. J. T. Baker Chemical Company: J. T. Baker, located in Phillipsburg, N. J., sponsors seminars nationwide concerning emergency response for various chemicals. Specific subjects include: Corrosive chemicals, insidious hazards, chemical storage and responses to emergency situations. Program cost: \$250-\$375.

Program information is Attachment E. Further information can be obtained from the J. T. Baker Training Section at (201) 454-2500.

F. Federal Emergency Management Agency (FEMA): FEMA training is provided by the National Emergency Training Center (NETC) located in Emmitsburg, Maryland, and is divided into two schools. The first school is the National Fire Academy (NFA), which provides emergency response training to fire departments, paramedics, and other emergency response personnel. The other school is the Emergency Management Institute (EMI). EMI provides training in management activities for emergency response to major emergencies, natural disasters, and aircraft accidents. At present, the EMI program for hazardous and toxic materials is limited.

Program information is Attachment F. Further information is available from Mr. Johnson (NFA) and Mr. Seifried (EMI) at (301) 447-6771.

G. IT Corporation: IT located in Martinez, California, will provide training in most toxic material subject areas. The sessions can be set up and tailored to meet the specific needs of the sponsoring organization. The course content ranges from short one day basic awareness to 1 or 2 week intensive training sessions. The sessions can be hosted at any location and can be sponsored by any private or public concern. Fees are based on course length, location, costs for guest speakers, etc. Further information is available from Mr. Chan Weisel at (415) 827-4723 or Mr. Mark Posse at (415) 228-5100.

H. Hazardous Materials Consultants: The Consultants, located in Corona, California, will provide training in most toxic material subject areas. The sessions can be set up and tailored to meet the specific needs of the sponsoring organization. The course content ranges from short one day basic awareness to 1 or 2 week intensive training sessions. The sessions can be hosted at any location and can be sponsored by any private or public concern. Fees are based on course length, location, costs for guest speakers, etc. Program information is Attachment G. Further information is available from Mr. Keith Walsh at (714) 371-1180.

3 Training Being Proposed or Developed:

A. City of Sacramento Hazmat Team Training: The Hazmat team members are receiving extensive training on toxic materials. The training program requires a total of 106 hours of instruction covering all facets of toxic materials from fire safety to on-scene control.

The Hazmat Team members are about 90% trained. Once their training is completed, the team members may be available, for a fee, to train other emergency response agencies in the Region. The details are being worked out. Further information can be obtained from Captain Jan Dunbar at (916) 449-5266.

B. Federal Emergency Management Agency: The Emergency Management Institute (EMI) is developing a series of courses dealing with toxic materials that will be available within the next 1-2 years.

The program will provide specific information about many of the areas of concern with toxic materials.

C. Office of Emergency Services (OES): OES is developing a three prong approach for emergency services in California. The first task is to develop a California Emergency Response Plan indicating responsibilities and actions necessary for responding to most emergencies. The second task is to develop a centralized notification procedure for hazardous situations. The last task is to coordinate training for all California emergency response personnel.

Once the plans are adopted, exercises will be conducted to test the plans. More information can be obtained from Mr. Jerry Shimeke at (916) 427-4285.

4. Training Being Given to Employees of Government Agencies and Companies

A. Caltrans: Caltrans provides an on-going training program for employees. Initially, each maintenance employee attends Hazardous Substance Spill Awareness Training. This two hour block of instruction is designed to heighten the awareness of the people who may first come in contact with the materials. The basic awareness concept alerts people to possible hazardous situations and what to do in that situation. Employees are required to attend a one day refresher course every two years.

Hazardous Substance Identification (ID) Teams have responsibility for responding to the spill location, identifying the materials involved and determining the course of action to be taken. The team is not equipped to clean-up a spill. All clean-up actions are conducted by an experienced and qualified company under contract with the state. The ID Team training includes material identification techniques and the wear and use of protective clothing. The training requires 16 hours for completion.

At present, this training is not open to the public or other government agencies. For further information contact Susan Sundell at (916) 322-9013 or Mr. Roy Collins at (916) 442-8226.

B. California Highway Patrol (CHP): Every officer receives general toxic material training at the CHP academy. Supervisors receive additional training from the State Fire Marshal. The training is not open to the public or outside agencies.

C. State Fire Marshal (SFM): A three module program in toxic materials is being developed as a joint effort between the SFM and the Sacramento Fire Department. The first module is now being presented to all police and fire people throughout the state. The eight hour presentation is designed to enhance the basic awareness of emergency response people about toxic materials and includes an introduction on toxic material identification. An estimated 20,000 California emergency response people will see the presentation.

Module II continues where Module I left off. The module will discuss on-scene activities including how to identify and treat toxic materials. The module is geared for a higher level in the police and fire departments (i.e., minimum of Captain in the Fire Department and Sergeant/Lieutenant in the Police Department). The module is expected to be completed in mid-to-late 1982.

Module III is a follow-on to Module II and is planned for release in 1983. It is designed for the top levels of emergency response organizations. The module will discuss on-scene control by the incident commander, site/area evaluation and establishing a command post.

Each course is eight hours long and is presented at no cost to the attendees. The modules will continue until all fire and police people have received the training. Once the training is completed, those who successfully complete the program receive a training certificate issued by the State Fire Marshal.

Because of the large number of emergency response staff requiring the training, there are no current plans to offer the program to private, or commercial concerns; however, it is possible in the future. More information can be obtained from Captain Jan Dunbar of the Sacramento Fire Department at (916) 449-5266.

D. Film Library: The Film Library operated by the Sacramento Fire Department maintains a good selection of multi-media presentations dealing with a wide variety of public safety subjects. Materials covering first aids, CPR, home fire safety, and toxic materials are available. The National Fire Protection Association (NFPA) has produced an excellent presentation which covers many of the basic concepts dealing with toxic materials. The program requires a total of 24 hours in 3-8 hour segments.

Smaller jurisdictions might not purchase the program because of its high cost at \$400; however, the Film Library has purchased the program and makes it available for use by local governmental and public agencies who have joined the Film Library. There is a yearly membership fee of \$60.00, but agencies who are members find it useful. More information about the Library can be obtained from Mr. Mike Keene at (916) 485-1700.

E. American Waste Company (AWC): AWC is involved in the transportation of toxic materials. When spills occur, a majority of them occur in the transfer/transportation phase.

Their truck drivers attend a one day course which addresses the placarding of trucks and shipments, Department of Transportation regulations and spill containment. Emergency response training covers the use of protective clothing and breathing apparatus. Information is also available from the Material Safety Data Sheet giving specific information about the materials being hauled. More information can be obtained from Mr. Ed Leach at (916) 635-8000.

F. Occidental Chemical: Safety is included as an integral part of the employees job. All new employees at any of the occidental plants attend the Safe Operator Training Program which provides basic information about on-the-job safety, including handling toxic materials.

All employees are required to review safety procedures established for each part of the plant. The procedures illustrates how to handle toxic materials, which ones they are likely to come in contact with, and what to do if there is a spill or fire. They are also required to attend regular safety meeting. Each employee also has direct access to the safety advisor for information and answers to their questions.

The company has also organized several chemical emergency response teams. There are five teams located in California. Each team consists of volunteers from several skill areas; chemical analysis, safety, environmental health, waste disposal, etc. Under limited circumstances, the teams may be available to provide community assistance. In general, the training is not available to public or government agencies.

The company is also actively involved in many of the hotlines (chlorine, chemtrac, pesticides) which are available to the public and emergency response agency. More information can be obtained from Mr. Thomas at (209) 858-2511.

G. Aerojet: New employees at Aerojet attend a basic safety indoctrination course covering all aspects of occupational safety. Once they actually start in their new job, their supervisor has primary responsibility to train them concerning the specific hazards in the work area. Detailed written procedures have been developed covering actions/safety precautions to be taken while handling toxic or hazardous materials. The safety office keeps Material Safety Data Sheets for all materials available for employee review. Monthly safety meetings are also held in all operating areas where hazardous materials are actually used. The training is not available to public or government agencies. Further information can be obtained from Mr. Bill Copeland at (916) 355-4591.

5. Comments

There are many toxic material training opportunities available. Several colleges sponsor short courses on many aspects of toxic materials. Most of the training is open to the public and tends to be for information and basic awareness in nature.

"How To" training is available but tends to be expensive. The programs sponsored by J. T. Baker Chemical, California Specialized Training Institute, Colorado Training Institute and the Operations Council of the American Trucking Associations provide in-depth training on various aspects of toxic materials.

Many major commercial concerns provide in-housing training for their employees. The training content ranges from basic awareness to intensive lecture and hands-on experience. For example: Before new Dupont employees can enter a tetra-ethyl lead (gasoline additive) plant, they must complete two weeks of intensive training.

Most emergency response personnel have had only basic awareness training, with minimal "How To" training. Because of this, the Sacramento Hazmat team should be encouraged to provide in-depth training to other local fire and police agencies in the region.

IT Corporation and Hazardous Materials Consultants may be instrumental in setting up any training program sponsored by SACOG. The concept of tailoring the courses to our specific needs and requirements is sound. In this manner, SACOG could sponsor a series of courses discussing any aspect of toxic materials.

Handling Hazardous Materials and Wastes

Practical, concentrated instruction
for managers and supervisors who
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THE OPERATIONS COUNCIL
OF THE
AMERICAN TRUCKING ASSOCIATIONS, INC.

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- Outlines areas of individual's compliance responsibility from the inception of a hazardous materials or wastes shipment through final destinations.
- Details procedures for establishing a total hazardous materials and wastes compliance program.
- Provides valuable reference and source materials which can be used on the job to help insure compliance.

TOC Hazardous Materials and Wastes A/V Training System

NOTE: IN ADDITION TO THE TEN PROGRAMS DESCRIBED BELOW, EACH TOC HAZARDOUS MATERIALS AND WASTES A/V TRAINING SYSTEM COMES COMPLETE WITH INSTRUCTION BOOKLET AND POST-PROGRAM QUESTION AND ANSWER BOOKLET.

1. **"A Commitment to Compliance"**—Why hazardous materials and wastes are regulated. A look at the early regulatory attempts and the agencies which enforced them. Why today's regulations were adopted. Which parts of the regulations apply to whom. (7:30)
2. **"CFR Title 49"**—Source of the hazardous materials regulations. Which parts of CFR 49 pertain to which types of companies. Abbreviations and definitions. How to use CFR Title 49. (13:30)
3. **"CFR Title 40"**—Source of the hazardous wastes regulations. Which parts of CFR 40 pertain to which types of companies. Abbreviations and definitions. How to use CFR Title 40. (21:40)
4. **"CFR 49, Table 172.101"**—A point-by-point examination of the Hazardous Materials Tables, the most important tool in compliance. How to use the Table in conjunction with any type of hazardous material shipping or transportation situation. (13:40)
5. **"DOT Shipping Papers"**—What constitutes a shipping paper. What you can do in your own operation's documentation procedures to be in compliance. An examination of general entries, additional description requirements, shippers' certification. (13:52)
6. **"EPA Documentation"**—An examination of *Hazardous Wastes Activities, Exception Report, Hazardous Wastes Manifest, Discrepancy Report, and EPA Annual Report*. Who must file these documents, when and where; how to complete the documents. (17:45)
7. **"Labeling and Marking"**—An examination of the basic requirements of labeling a hazardous materials shipment. A look at potential problems: prohibited labeling, additional labeling requirements, labels for mixed and consolidated packagings, authorized label modification, placement of labels and label specification. General requirements for marking a hazardous materials shipment; allowable abbreviations, radioactive materials, liquid hazardous materials, packagings containing ORM materials. (8:30)
8. **"Packaging and Shipping Containers"**—An examination of the types of authorized packaging and shipping containers, and which packaging and containers are authorized for which commodities. (10:05)
9. **"Placarding"**—What substances require vehicle placarding. How to determine which placard to use and which combinations of materials or wastes require multiple placarding. (9:50)
10. **"Hazardous Materials and Wastes and the Shipper"**
OR
"Hazardous Materials and Wastes and the Carrier"

Each No. 10 program is an overview of the requirements of compliance. Make your selection based on your particular type of operation.

TOC'S HAZARDOUS MATERIALS & WASTES A/V TRAINING SYSTEM IS COMPATIBLE WITH ANY EQUIPMENT UTILIZING 35MM CAROUSEL SLIDE TRAYS AND AUDIO CASSETTE SYNCHRONIZATION, SUCH AS: • SINGER CARAMATE • BELL & HOWELL RINGMASTER • FAIRCHILD SLIDE SYNCHRO 35 • KODAK AUDIO VIEWER, ETC.

TOC-Hazardous Materials and Waste AV Training System

PRICE SCHEDULE & ORDER FORM

	<u>NON-TOC MEMBERS</u>	<u>TOC MEMBERS</u>
1 System	\$325.00/ea.	\$225.00/ea.
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6 or More Systems	\$276.25/ea.	\$191.25/ea.

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NOTE: EACH TOC HAZARDOUS MATERIALS AND WASTES A/V TRAINING SYSTEM CONSISTS OF NINE (9) PROGRAMS PLUS A TENTH PROGRAM, OF WHICH TWO ARE AVAILABLE. PLEASE INDICATE WHICH PROGRAM YOU WANT.

- "Hazardous Materials and Wastes and the Shipper"
- OR**
- "Hazardous Materials and Wastes and the Carrier"

Please send _____ TOC Hazardous Materials and Wastes A/V Training System(s) at \$_____ ea., for a total of \$_____ to: _____
(Quantity) _____
(Price) _____

NAME

TITLE

COMPANY

STREET ADDRESS **(for UPS shipment)**

CITY/STATE/ZIP

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and Wastes Training

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A series of ten slide and audio cassette programs designed to provide manufacturers, shippers and carriers of hazardous materials and wastes a complete in-house training capability.

Developed and Presented by
THE OPERATIONS COUNCIL of the
American Trucking Associations



Any company which ships or transports hazardous materials or wastes is required by law to train its personnel regarding compliance with U.S. Department of Transportation (DOT) hazardous materials regulations. Shippers, generators, carriers and transporters are also required by the Environmental Protection Agency (EPA) to be familiar with and instruct their employees in EPA hazardous wastes regulations.

Unfortunately, these regulations are complex and frequently confusing. The Operations Council's seminar on **HANDLING HAZARDOUS MATERIALS AND WASTES** is a totally unique and highly effective educational program designed to help your company meet its training obligations under the law. Remember, failure to comply with DOT hazardous materials regulations and EPA hazardous wastes regulations can result in fines of up to \$25,000 per day in addition to the more serious potential for injury and death that accompanies every improperly prepared shipment of these materials.

How do the EPA and DOT Hazardous Wastes and Substances Regulations impact your company?

The EPA regulations impose strict requirements on shippers, carriers and consignees who generate, transport, treat, store or dispose of any hazardous waste. Under these regulations, many commodities not previously regulated by DOT require companies handling them to provide a great depth of information and documentation to both EPA and DOT.

Among the many different requirements of the EPA regulations are:

• Notification of Hazardous Waste Activity

Any company generating, shipping or transporting hazardous wastes or toxic substances as defined in Code of Federal Regulations #40 and #49 must file this notification with EPA.

• Hazardous Waste Manifest

Shipments of hazardous or toxic wastes must be accompanied by numbered hazardous waste manifests which require a signed compliance certification from the shipper. Existing documentation generally will not meet this requirement. In most cases, the EPA regulations require more complex and detailed shipping documentation. The seminar agenda features a discussion of relevant state solid wastes programs, many of which require additional information beyond the federal requirements.

• New Classes of Hazardous Materials and Wastes

Under the EPA regulations, totally new classes of hazardous materials have been created: Ignitable Wastes, Corrosive Wastes, Reactive Wastes and EP Toxic Wastes.

• Changes in Shipping Container Usage

EPA regulations mandate significant changes in current regulations governing the use of Single Trip Containers

and Non-reusable Containers of hazardous materials and wastes.

• Placarding Hazardous Wastes in Transit

Under the EPA regulations adopted by DOT, additional marking requirements are now required for all carriers transporting hazardous or toxic wastes.

At This Seminar You Will Learn:

- Overall shipper and carrier responsibility under the DOT hazardous materials regulations.
- Overall shipper and carrier responsibility under EPA and DOT hazardous wastes and substances regulations.
- How DOT and EPA regulations interface.
- A management perspective of all the requirements of a hazardous materials or wastes shipment from its inception through its destination.
- Interpretation of the "language" of CFR #40 and #49; terms, abbreviations and definitions.

Special Seminar Features

- **A Practical Seminar** - This program is not theoretical. It will be a nuts-and-bolts examination of the regulations and how to apply them to any shipping or motor carrier operation.
- **Programmed Instruction** - In addition to audiovisuals, lecture and group discussion, the seminar will utilize a programmed instruction text which virtually guarantees retention of the material presented and which can be used later as an on-the-job reference tool.
- **Management Perspective** - You will gain the broad knowledge and firm grasp of hazardous materials and wastes regulations that are so vital to managing their shipment and transportation.
- **Intensive One-Day Format** - Because the amount of time you spend away from your company must be kept to a minimum, this seminar uses a highly focused, carefully targeted one-day structure to make best use of your valuable time.
- **Immediate, On-Line Application** - The seminar training format enables participants to return to their companies and immediately and directly apply on the job the material presented.
- **Certificates of Professional Development** - Certificates will be awarded by The Operations Council of American Trucking Associations to each participant completing the program.

The Operations Council's Seminar on
**HANDLING HAZARDOUS MATERIALS AND WASTES
PROGRAM**

NOTE:

Each seminar participant will receive and use throughout the training session a newly revised instruction text on "Handling Hazardous Materials and Wastes" as well as a current reprint of CFR #49, 172.101, the Hazardous Materials Table.

• **Overview**

Introduction and explanation of seminar objectives. Why were the regulations adopted? Which parts of the regulations apply to whom? What does the future hold in shipping and transporting hazardous materials and wastes?

• **History of Hazardous Materials and Wastes Regulations**

Why we are where we are today in regulating hazardous materials and wastes. A look at the early regulatory attempts and the agencies which enforced them. An explanation of the programmed instruction format.

• **CFR #40 and #49**

Definitions of hazardous materials. Discussion of Part 171 of CFR #49—definitions and abbreviations of hazardous materials, substances and wastes. Discussion of CFR #40—definitions of hazardous wastes and substances.

• **Hazardous Materials Tables**

A point-by-point examination of the Hazardous Materials Tables, demonstrating how to use the tables in conjunction with any type of hazardous material shipping or transportation operation. Special attention will be devoted to the DOT Hazardous Materials Tables which contain the new U.N. and N.A. identification numbers.

• **Shipping Papers**

What constitutes a shipping paper. What you can do in your own operation's documentation procedures to be in compliance. General entries. Additional description requirements. Shippers certification. Hazardous Waste Manifest.

• **Marking**

A discussion of the general requirements for marking a hazardous materials shipment, emphasizing allowable abbreviations, radioactive materials, liquid hazardous materials, packaging containing ORM materials.

• **Labeling**

An examination of the basic requirements of labeling a hazardous materials shipment. A closer look at specific potential problem areas: prohibited labeling, additional labeling requirements, radioactive materials, labels for mixed and consolidated packagings, authorized label modifications, placement of labels and label specification.

• **Placarding**

What substances require vehicle placarding. How to determine which placard to use and which combinations of materials or wastes require multiple placarding. An examination of the newly required ID number placarding system.

• **Packaging**

An overview of the types of authorized packagings available. Which types of packages are authorized for which commodities.

• **Notification of Hazardous Wastes Activity**

Who must file the notification. When and where to file. A detailed examination of the report and how to complete it.

• **EPA Exception Report**

Who must file the report. When and where to file. A detailed examination of the report and how to complete it.

• **Discrepancy Reports**

A study of the new reports which must be filed when a discrepancy occurs regarding the number or types of containers, or as to the specific waste itself when received by the TSDF.

• **Annual Reports**

An examination of the annual report of all wastes shipments tendered for transport which must be filed by generators to the appropriate state authorities or the federal EPA.

• **Reportable Quantity Hazardous Substance Shipment**

An examination of DOT testing requirements for shippers of hazardous substances to determine if they are tendering a reportable quantity hazardous substance shipment as well as the documentation requirements for these substances. Also an examination of the new reporting requirements for carriers in the event of a spill of a reportable hazardous substance.

• **Summary and Review**

About the Instructor, EDWARD C. BLUM

This marks the third consecutive year that Edward C. Blum has conducted the HANDLING HAZARDOUS MATERIALS AND WASTES Seminars for The Operations Council of American Trucking Associations. Mr. Blum, President of Trans-Resource, Inc., developed the series exclusively for TOC in 1979 and has revised and updated the program in each succeeding year.

Mr. Blum began his career in the motor carrier industry 16 years ago with Consoli-

dated Freightways where he served as Manager of Personnel Administration and later as Director of Training and Development.

He then spent six years as Director of Industrial Relations with Mid-American Lines in Kansas City. While in this capacity, he was responsible for the Safety and Government Regulations Compliance Department, among others.

After a brief stint as President of Overland

Plazas, a Truckstop-Restaurant company, Mr. Blum founded Trans-Resource, an executive recruiting and human resources consulting firm. His clients include Englehard Chemical, Sandia Labs, McGraw-Hill Co., the Department of the Navy, Re-Cycling Industries and numerous motor carriers.

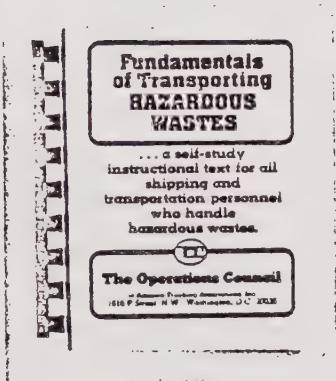
Mr. Blum will conduct each session himself and will bring to each seminar many years of both theoretical in-the-classroom and practical on-the-job training experience.

Handling Hazardous Materials and Wastes 1981-82 Seminar Schedule

DATE	CITY	LOCATION
January 14 (Thurs.)	Charleston, SC	Holiday Inn-Airport I-26 & W. Aviation Avenue
January 15 (Fri.)	Atlanta, GA	Holiday Inn-Airport 1380 Virginia Avenue
February 8 (Mon.)	Phoenix, AZ	Holiday Inn-Airport 2201 South 24th Street
February 10 (Wed.)	Anaheim, CA	Holiday Inn 1550 S. Harbor Blvd.
February 11 (Thurs.)	San Jose, CA	Holiday Inn-Airport 1355 North 4th Street
February 12 (Fri.)	Oakland, CA (Emeryville)	Holiday Inn-Oakland Bay Bridge 1800 Powell Street
March 1 (Mon.)	New Orleans, LA	Holiday Inn-Airport 2929 Williams
March 2 (Tues.)	Houston, TX	Holiday Inn-Eastex Freeway 10525 Eastex Freeway
March 3 (Wed.)	Dallas, TX (Irving)	Holiday Inn-Dallas/Ft. Worth Arpt. N. Hwy. 114 at Esters Road
March 4 (Thurs.)	Oklahoma City, OK (Airport Area)	Holiday Inn-West I-40 at Meridian
March 5 (Fri.)	Wichita, KS	Ramada Inn-Central 221 E. Kellogg
March 22 (Mon.)	Chicago, IL (O'Hare Airport Area)	Holiday Inn-Des Plaines Touhy Avenue & U.S. 45
March 23 (Tues.)	Indianapolis, IN	Holiday Inn-Airport 2501 S. High School Road
March 24 (Wed.)	Atlanta, GA	Holiday Inn-Airport 1380 Virginia Avenue
March 25 (Thurs.)	Birmingham, AL	Holiday Inn-Airport 5000 10th Avenue, North
March 26 (Fri.)	Tampa, FL	Holiday Inn-Int'l. Arpt. 4500 Cypress
April 12 (Mon.)	Los Angeles, CA	Holiday Inn-Int'l. Arpt. 9901 La Cienega Blvd. at Century Blvd.
April 13 (Tues.)	Oakland, CA (Emeryville)	Holiday Inn-Oakland Bay Bridge 1800 Powell Street
April 14 (Wed.)	Portland, OR	Holiday Inn-Airport 82nd Street & Columbia Blvd.
April 15 (Thurs.)	Seattle, WA	Holiday Inn-Tacoma Int'l. Arpt. 17338 Pacific Hwy. South
April 16 (Fri.)	Denver, CO	Holiday Inn-Airport 4040 Quebec
May 3 (Mon.)	Newark, NJ	Holiday Inn-Newark Int'l. Arpt. North 160 Holiday Plaza
May 4 (Tues.)	Philadelphia, PA (Essington)	Holiday Inn-Airport South 45 Industrial Highway
May 5 (Wed.)	Cleveland, OH	Holiday Inn-Brookpark 16501 Brookpark
May 6 (Thurs.)	Detroit, MI (Taylor)	Holiday Inn-Taylor 20777 Eureka Road
May 7 (Fri.)	Chicago, IL (O'Hare Airport Area)	Holiday Inn-Des Plaines Touhy Avenue & U.S. 45
May 18 (Tues.)	Kansas City, MO (Raytown)	Holiday Inn-Southeast U.S. 50 & 63rd Street
May 19 (Wed.)	St. Louis, MO (Bridgeton)	Holiday Inn-Airport North 4545 N. Lindbergh

NOW AVAILABLE... THREE TRAINING TOOLS PROVIDING BASIC INSTRUCTION IN HAZARDOUS MATERIALS AND WASTES REGULATIONS

These publications are inexpensive enough so that you can provide all your employees with a copy of each. They are small enough to be carried on the job for quick study and reference and, most importantly, they will help you solve the problem of rudimentary "haz mat" training on a cost-effective, company-wide basis.



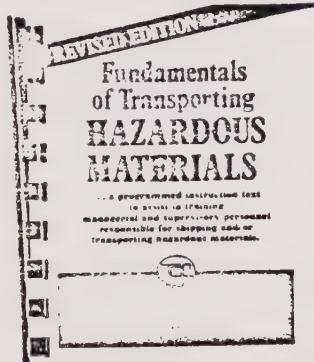
Fundamentals of Transporting Hazardous Wastes, patterned closely after its companion publication on hazardous materials, is a programmed instruction course and a reference manual in one.

Environmental Protection Agency (EPA) hazardous wastes regulations — the most recently regulated aspect of hazardous materials commerce — include completely new labeling requirements, a new manifest system and an entirely new vocabulary. In addition, many companies heretofore considered strictly carriers, are now considered "generators" of certain hazardous wastes. As such, they are responsible for complying with various shipper requirements in these new regulations.

Fundamentals of Transporting Hazardous Wastes is designed to assist companies in training all their employees in the complexities of the EPA hazardous wastes regulations and to serve as a ready reference tool in the daily performance of their jobs.

TABLE OF CONTENTS

- Introduction
- History & Overview of Regulations & Relationships to DOT Hazardous Materials
- Hazardous Wastes Containers
- Documentation — Shipping Papers
- Marking & Labeling Hazardous Wastes
- Placarding Hazardous Wastes
- Proper Handling of Hazardous Wastes
- Emergencies
- EPA Hazardous Wastes Paperwork & Recordkeeping Requirements



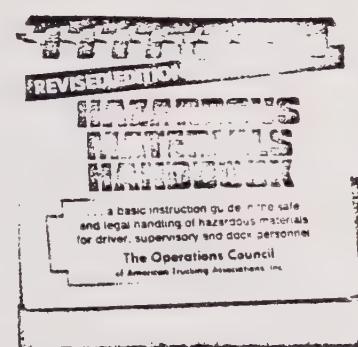
Fundamentals of Transporting Hazardous Materials is a programmed instruction text and a reference publication in one. This book is designed to supplement more formalized training programs necessitated by complex DOT hazardous materials regulations. Exposes drivers, dockmen and supervisory personnel to a groundwork of knowledge on hazardous materials transportation. Helps solve the problem of providing rudimentary "haz mat" training on a company-wide basis.

TABLE OF CONTENTS

Introduction and Course Instructions
Course Text
Unit 1 — HM Definitions and Applicability
Unit 2 — Identification of HM Shipments
Unit 3 — Handling of Hazardous Materials
Unit 4 — Driving with HMs Onboard

Post Course Review

Ready Reference
Section 1 — Placarding
Section 2 — Shipping Papers
Section 3 — Marking HM Packages
Section 4 — Labels
Section 5 — Containers and Packaging
Section 6 — Handling
Section 7 — Emergency Procedures



Hazardous Materials Handbook is a very basic text providing elementary rules and instructions for line, dock and driver personnel involved in handling hazardous materials. Based on a progressive learning technique which stresses only selected aspects of the hazardous materials regulations, the effectiveness of the Hazardous Materials Handbook lies in its simplicity of design and purpose.

TABLE OF CONTENTS

- Foreword
- The Law
- Identification of Hazardous Materials
- Classifications and Quantities that Require Placarding
- The DANGEROUS Placard
- Multiple Placarding
- Shipping Papers
- Markings
- Labels
- Handling & Loading
- Driving
- Emergencies
- CHEMTREC
- Review

PRICE SCHEDULE (all three publications)

NOTE: Quantity discounts also apply to "mixed orders."

	TOC Motor Carrier Members	Non-Members
Single Copy Order	\$3.75 per copy	\$4.50 per copy
2 - 50 Copies	\$3.20 per copy	\$3.95 per copy
51 - 100 Copies	\$2.90 per copy	\$3.65 per copy
101 - 150 Copies	\$2.70 per copy	\$3.45 per copy
151 - 200 Copies	\$2.60 per copy	\$3.35 per copy
200 or more Copies	\$2.50 per copy	\$3.25 per copy

Please send the following:

(Quantity) copies of "Fundamentals of Transporting Hazardous Wastes"
(Quantity) copies of "Fundamentals of Transporting Hazardous Materials."
(Quantity) copies of "Hazardous Materials Handbook."
Remittance enclosed \$ _____

Order Form

NOTE: Remittance in U.S. funds only must accompany order!

PLEASE ALLOW 4-5 WEEKS FOR DELIVERY

NAME _____ TITLE _____
COMPANY _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____

CALIFORNIA
SPECIALIZED TRAINING INSTITUTE

COURSE CATALOG FOR
ACADEMIC YEAR 1981-1982



CAMP SAN LUIS OBISPO, CA
PHONE(805)544-7101

CEMC (CON'T)

HAZARDOUS MATERIALS (44 Hours)

The magnitude of the hazardous materials problem has reached the point where it is now recognized as an element of utmost concern for contemporary society. Rapidly evolving technology and a rising demand by the consumer have contributed to the tremendous growth of the hazardous materials problem. The manufacture, use, storage, handling, transport and disposal of hazardous materials are all vulnerable to accidents resulting from human error or mechanical failure, and are likewise vulnerable to intentional destructive acts from criminal events or terrorist attack. Regardless of the cause, the consequences of the unexpected or uncontrolled incident, accident, spill or leakage can be catastrophic, with incredible threat to human life and the environment. This course addresses the special management aspects of these emergencies by defining the problem and discussing the managerial concerns that follow. This course, with its real-time, role-playing exercise, is of vital importance to concerned members of the public and private sector, including administrative, regulatory, service, and emergency-oriented government agencies as well as those associated elements of the business community.

HM82-1	21-25 Sep 81
HM82-2	2-6 Nov 81
HM82-3	4-8 Jan 82
HM82-4	1-5 Mar 82
HM82-5	26-30 Apr 82
HM82-6	7-11 Jun 82



INFORMATION

California Specialized Training Institute Academic Schedule 1982

TUITION

Tuition for the CEMC courses may be waived at the discretion of the Director of CSTI upon receipt of a written request of the nominating agency. Payment will be made during registration by government agency purchase order check, money order or cashiers check made payable to the "State of California". Personal checks are not acceptable. Payment of the meal fee cannot be included with the tuition fee. The tuition fee schedule is shown below.

Student categories are:

- A - Military (Active & Reserve).
- B - California POST certified law enforcement.
- C - California State and local government.
- D - Non-California residents, Private industry or Federal civilians.
- E - Non-profit agencies, i.e., Red Cross, Salvation Army, etc.
- F - All others.

CIVIL EMERGENCY MANAGEMENT COURSES

<u>Earthquake</u>		<u>Planning Techniques</u>	
E82-4	22-26 Feb	82	P82-2
E82-5	29 Mar - 2 Apr	82	P82-3
E82-6	19-23 Apr	82	* Hazardous Mat. Inc./ACC.
E82-7	17-21 May	82	
E82-8	21-25 Jun	82	

Civil Disorder Situations

CD82-2	8-12 Mar	82	HM82-5
CD82-3	3- 7 May	82	HM82-6

Nuclear Facilities

NF82-2	15-19 Mar	82
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Course (Hrs.)	Student Category					Range	Master Course
	A	B	C	D	E		
CEMC-Res. (44)	0	\$100	\$200	\$100	\$200		
CEMC-Exer. (24)	0	60	60	120	60	120	
ACT-(32)	0	120	120	240	---	---	
ACT-(20)	0	75	75	150	---	---	
Rn. Master-(40)	0	150	150	300	---	---	
Baton-(20)	0	75	75	150	---	---	
OSFT-T-(40)	0	150	150	300	---	---	
OSFT-(40)	0	150	150	300	---	---	
Terrorism (40)	0	150	150	300	---	---	

-19-

CRIMINAL JUSTICE COURSES

<u>Officer Safety & Field Tactics</u>		<u>Terrorism</u>	
OS82-5	22-26 Mar	82	R82-2
OS82-6	5- 9 Apr	82	R82-3
OS82-7	19-23 Apr	82	R82-4
OS82-8	21-25 Jun	82	
<u>Officer Safety & Field Tactics</u>		<u>For Trainers</u>	
T82-3	1- 5 Feb	82	
T82-4	22-26 Mar	82	
T82-5	10-14 May	82	
T82-6	14-18 Jun	82	

California Specialized Training Institute
CAMP SAN LUIS OBISPO, CALIFORNIA 93406

APPLICATION

FULL NAME				
RANK/TITLE/POSITION				
REPRESENTING (AGENCY)				
AGENCY STREET ADDRESS				
CITY, STATE, ZIP CODE				
AGENCY TELEPHONE NUMBER (with Area Code)				
HOME ADDRESS				

COURSE DESIRED	1st Choice	2nd Choice	3rd Choice	4th Choice

STATEMENT OF APPLICANT'S PROFESSIONAL EXPERIENCE IN RELATION TO COURSE:

If selected for enrollment, the applicant will represent this agency and attend the course in a duty status.

SIGNATURE AND TYPED OR PRINTED NAME AND TITLE OF AGENCY HEAD	DATE
--	------

Mail applications as soon as possible to the appropriate student selection agency.

APPLICANT

STUDENT SELECTION AGENCY

Active Military Service and
Reserve Personnel (excluding
National Guard)

Respective Military Headquarters

Calif. National Guard

California Military Department
ATTN: CAOT-IT
P. O. Box 214405
Sacramento, CA 95821

Other National Guard

National Guard Bureau
ATTN: MTB, ARNG OPNS Center
Edgewood Area
Aberdeen Proving Ground, MD 21005

California Highway Patrol

CHP State Headquarters
P. O. Box 898
Sacramento, CA 95804

American National Red Cross

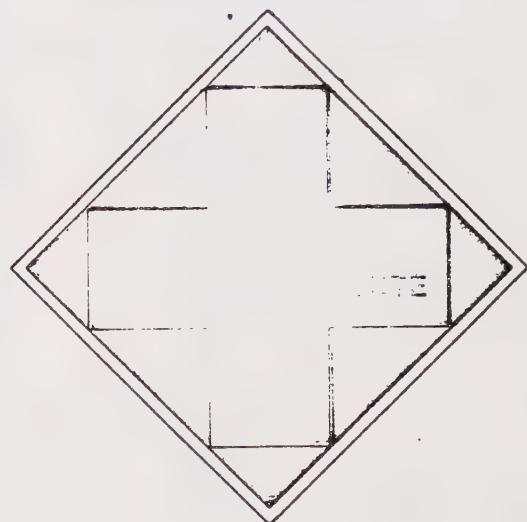
ANRC
ATTN: J. Haigwood
P. O. Box 57930
Los Angeles, CA 90057

All other applicants

CSTI
P. O. Box G
San Luis Obispo, CA 93406

SOCIAL SECURITY NUMBER: _____ Must be included for peace
officers that desire POST certification.

HAZARDOUS MATERIALS PROGRAMS



COLORADO TRAINING INSTITUTE
1001 EAST 62ND AVE.
DENVER, COLORADO 80216
(303) 289-4891



COLORADO DIVISION OF HIGHWAY SAFETY



COLORADO COMMITTEE ON HAZARDOUS
MATERIALS SAFETY

The Colorado Training Institute

Over 4.5 million chemicals have been registered with the U.S. Environmental Protection Agency and another 375,000 new entries are being made each year, making hazardous materials education essential for private industry, public agencies and the communities they protect.

The Colorado Training Institute in Denver, Colorado is the first professional school of its kind in the country devoted totally to promoting hazardous materials safety through education. From its first courses targeted to emergency response personnel, the school has grown and broadened its scope to include seminars for shippers and carriers, dispatchers and other involved personnel.

CTI serves as a vital resource for personnel from law enforcement, fire departments, emergency response, the U.S. Coast Guard, the U.S. Army, airlines, manufacturing companies, chemical companies, shippers and carriers.

The school is funded by the U.S. Department of Transportation through the Colorado Division of Highway Safety. It operates under four full time employees, offered by the Colorado Division of Highway Safety. The instructors represent major national companies and agencies who volunteer their time with the assistance of the organizations they represent.

For seminar dates or additional information, contact:

Colorado Training Institute
1001 E. 62nd Ave.
Denver, Colorado 80216
(303) 289-4891

Three-Day Hazardous Materials Seminar

This seminar is designed for those individuals who maintain responsibility for the safety of themselves and the communities they serve if a hazardous materials incident should occur. Because students represent diverse fields, from law enforcement to civil defense personnel, communication in and out of the classroom enhances the knowledge gained. Presentations, given by nationally-recognized professionals, are designed to be of interest and help to all students.

Firemen, law enforcement officers, civil defense personnel, ambulance crews — anyone who may be involved in some phase of an incident — will find the seminar essential for proper response.

Day 1

- General classes of Hazardous Materials, Labels and Placards
- Hazardous Materials by Rail
- First Aid
- Helicopter Demonstration
- Radioactive Materials
- Shipping Papers
- Explosives

Day 2

- Crescent City Film
- Tactics of Firefighting
- Handling Compressed Gas Emergencies
- Breathing Apparatus
- Pesticides and Industrial Chemicals
- Safety Features of Cargo Tanks
- Containment and Control of Hazardous Materials
- Agencies Available for Assistance
- Panel Discussion

Day 3

- Tactics of Law Enforcement
- Setting up a Command Post
- First Response
- Simulated Incidents and Workshops

Two-Week In-Depth Hazardous Materials Seminar

CTI's two-week in-depth program is unique in the country, geared for management and supervisory personnel who have attended the three-day seminar. The comprehensive course includes valuable demonstrations and hands-on workshops to reinforce the information presented. Courses include:

Code of Federal Regulations -- Familiarizes emergency response personnel as well as private industry in the proper use of the complex regulations established by the Department of Transportation.

Agencies Available for Assistance -- A review of the diverse agencies available to assist in emergencies and the services they offer.

Industrial Chemicals -- A look at the most commonly shipped industrial chemicals, how they are shipped and how they should be handled in an incident.

Acids/Alkalies -- The characteristics of most common acids and alkalies are discussed, including their reactions and the proper response necessary in an incident.

Explosives -- A brief history of explosives precedes a discussion of the various types of explosives and effective methods of handling them in emergencies.

Electrical Hazards -- Electrical hazards pose serious threats and should not be overlooked. What they are and how to deal with them will be discussed.

Pipeline Transportation -- Distribution and high pressure lines are covered, along with what can and has happened in pipeline emergencies and how they were handled.

Specification Containers -- Proper containers vary with the commodities being transported. Discussion focuses on determining appropriate containers.

Cargo Tanks -- Various cargo tanks and the commodities they transport are reviewed in conjunction with emergency procedures in an incident.

Petroleum Spills -- Students learn how to place booms to effectively contain a petroleum spill in a hands-on workshop in the South Platte River.

Compressed Gas, Flammable and Combustible Liquids -- Discussion includes how to load and off-load rail and tank vehicles, and response procedures for accidents.

Organic Peroxides -- The nature of organic peroxides and the appropriate safety measures in an incident are thoroughly addressed.

Pesticides -- Information presented on pesticides and patching small containers is followed by an exercise in cleaning up a simulated spill outside.

Cryogenics -- Various types of cryogenics and how they react are shown in the classroom. Past accidents and the problems encountered are also discussed.

Poison Gas -- Commercial and military gasses are discussed and compared. Proper response to emergency situations is emphasized.

Chlorine and Chlorine Compounds -- An informational discussion is followed by student application of chlorine kits to cylinders.

Anhydrous Ammonia -- The uses of anhydrous ammonia, methods of application, safety precautions and emergency procedures are discussed.

Radioactive Materials -- Valuable information presented on radioactive materials includes using various survey instruments to locate a hidden radioactive source.

Protective Equipment -- After a discussion of the equipment which is available, students put on self-contained breathing apparatus, acid suits and other protective equipment.

Rail Tank Incidents -- Realistic, typical problems are demonstrated on a rail tank donated by the Burlington-Northern Railroad and solutions are given.

Containment -- A full day is devoted to containment of hazardous materials. Students patching and plugging 55 gallon barrels and rail tank cars will find containment is limited only by their imagination.

Contingency Planning -- Students learn how to plan for the inevitable.

Evacuation -- Discussion will focus on how and when to evacuate, and the special problems that can arise.

Information for Students Attending the Two-Week Seminar

Please bring the following:

Clothing:

- Casual wear for classes, unless otherwise instructed by your agency
- Fatigues, coveralls or old clothes for outside workshops
- Rubber overshoes or boots
- Gloves (warm)

Classroom Supplies

- Note paper (A three ring binder is furnished)
- Pen or pencil
- Highlighters

Participants wishing to have mail sent to them may do so, in care of CTI:

(Name)

c/o Colorado Training Institute
1001 East 62nd Ave.
Denver, Colorado 80216

Commercial Vehicle Inspection Seminar

This four-day seminar will instruct private industry on proper compliance of commercial vehicle laws, and assist law enforcement agencies and fire departments in effective enforcement of the regulations. The following subjects are addressed:

Day 1

- Truck Weights and Gross Ton Mile Tax Laws
- Bureau of Motor Carriers' Regulations
- Truck Inspection Overview

Day 2

- Inspection Forms
- Brake Systems
- Cargo Tank Overview
- Routine Vehicle Inspection System

Day 3

- Vehicle Inspection
- Vehicle Defects
- Hazardous Materials Overview

Day 4

- Inspection Team Exercises (2)
- Truck Inspection
- Shipping papers, Log Books and Driver Qualification

Shippers and Carriers Seminar

Probably no other group assumes as much responsibility for the safe transportation of hazardous materials as shippers and carriers. Those responsibilities, outlined in the Department of Transportation's Code of Federal Regulations, are exhaustive and complex, and carry a high price tag when they are violated.

CTI's five-day seminar for shippers and carriers is essential for dispatchers, safety directors, dock foremen, billing clerks or anyone responsible for overseeing that hazardous materials are ready for shipping.

The course is intensive and thorough, responding to a common complaint by shipping personnel that many training courses are too fast and allow no time for comprehension. Workshops are conducted to reinforce the information presented. Topics addressed include:

Day 1

- Code of Federal Regulations
- Moral Responsibilities

Day 2

- Packaging, Marking and Labeling
- Shipping Papers

Day 3

- Responsibilities of Shipping Clerks, Pickup and Delivery Drivers
- Temporary Storage on Dock or in Warehouse
- Compatibility
- Loading, Blocking and Bracing by: Truck, Rail and Air.

Day 4

- Material Handling
- Part 397 - BMC Safety Regulations
- Incident and Accident Reports
- Hazardous Waste Regulations

Day 5

- Containment
- Agencies Available for Assistance

Cargo Tank Compliance/ Inspection Course

CTI's five day program covers every aspect of cargo tanks and stresses preventive maintenance. It is vital for chemical manufacturers and shippers. The following subjects are covered:

Industry and Deregulation -- A brief overview of deregulation and the impact it will have on all concerned.

Commodities -- Discussion includes the characteristics of products transported in cargo tanks and evaluation of past incidents which have occurred because of poor maintenance or from accidents.

Code of Federal Regulations -- Covers the regulations in Title 49, Parts 100 through 199 as it applies to the tank industry.

Field Trip to Tank Manufacturers -- A tour of a cargo tank facility enables students to observe cargo tanks in various stages of construction.

Authorized Tanks -- Configuration of all tanks, including the nurse, bob-tail and portable tanks will be covered.

Inspection Procedures of Cargo Tanks -- Students learn how to correctly inspect a cargo tank.

Basic Tanks and Accessories -- The different types of tanks discussed include: light oil, low pressure, corrosive, high pressure, cryogenics, tube-trailers, nurse tanks, non-specified combustible, vacuum trucks and special permit tanks. Accessories covered include power take-offs, heaters and coolers, agitators, hoses, fittings and valves.

Field Trip to Loading Rack -- First hand observations of cargo tank loading will be offered at several loading racks.

Insurance and Liability -- The amount of insurance a company must carry, and its liabilities, as dictated by deregulation, are discussed.

Bureau of Motor Carriers Safety Regulations -BMC safety regulations, parts 390 through 399 will be emphasized.

Record Keeping -- The certification and recertification of tanks, maintenance records and hazardous materials incident reports will be discussed.

Mock Office Inspection -- How an inspection is carried out and the elements in receiving a good inspection are both covered.

COLORADO TRAINING INSTITUTE'S

Program Schedule

Hazardous Material Awareness

\$ 50

June 22-26, 1981 (Night Program \$35)
August 18-19-20, 1981
December 1-2-3, 1981
January 5-6-7, 1982
April 6-7-8, 1982
July 6-7-8, 1982
November 2-3-4, 1982

Hazardous Material In-Depth

\$ 400

May 4-15, 1981
July 13-24, 1981
September 14-25, 1981
November 9-20, 1981
February 1-12, 1982
April 19-30, 1982
June 14-25, 1982
August 9-20, 1982
October 18-29, 1982

Commercial Vehicle Inspection

\$ 160

June 2-5, 1981
October 13-16, 1981
March 2-5, 1982
May 11-14, 1982
July 20-23, 1982
September 21-24, 1982

Cargo Tank Compliance/Inspection

\$ 200

April 27-May 1, 1981
July 27-31, 1981
October 19-23, 1981
March 8-12, 1982
May 17-21, 1982
July 26-30, 1982
September 27-October 1, 1982

Shippers/Carriers

\$ 200

August 3-7, 1981
December 7-11, 1981
March 29-April 2, 1982
June 7-11, 1982
September 13-17, 1982
November 15-19, 1982

* Prices and dates are subject to change without notice. Above prices effective July 1, 1981.

There will be a 10 percent discount when three or more individuals, from the same agency, are registered at the same time, for any of the scheduled programs (except the hazardous materials awareness) and paid for at least 30 days in advance of the first course.

There are a number of spaces reserved in each CTI class eligible for a 30% reduction in tuition for residents of Colorado that are sponsored by a Colorado agency and approved by the Division of Highway Safety.

Refunds

Refunds of tuition for class cancellation received less than two weeks prior to class date will be subject to a 10% processing fee.

Transfers

Registrations may be transferred once at no charge, from one program to another, thereafter there will be a ~~20~~ 10% charge for each transfer.

For additional information please contact:

Colorado Training Institute
1001 East 62nd Avenue
Denver, Colorado 80216

(303) 289-4891

(over)

Registration Form

Name _____ Agency _____
Address _____ (Street) _____ (City) _____ (State) _____ (Zip) _____ Birthdate _____

Job Title _____ Phone No. _____ Enclosed is Check No. _____ or Purchase Order No. _____ for the _____ (Course Title)
to be conducted on _____, 19_____

Duties and Responsibilities _____

If you have any health problems which we should be aware of, or which would prevent you from participating in the demonstrations and workshops, please indicate:

There will be a 10 percent discount when three or more people are registered at the same time for any of the above programs (except the Three-Day Awareness Program) and paid for at least 30 days prior to the session.

All payments must be received fifteen (15) days prior to the first day of the program, unless previous arrangements have been made with CTI office.
All discount payments must be received thirty (30) days before first class.

TOXIC AND HAZARDOUS SUBSTANCES PROGRAM

University Extension

SCHEDULED COURSES

WINTER 1982

February 25	Toxic Substances, Hazardous Wastes: Legislative Update
March 5	Hazardous Wastes in California: Patterns, Possibilities, Politics and Policies

SPRING 1982

April 23 (UCD) May 14 (UCI)	Developing Local Hazardous Materials Management Plans
May 5, 12, 19, 26 afternoon seminars	Chemicals of Current Interest
June 1	Principles of Environmental Toxicology for NonScientists

SUMMER 1982

June 15-16	Groundwater and Pesticides (with Cooperative Extension)
July 13 (UCI)	Motor Carrier Safety for Transporters of Hazardous Materials
July 20 (UCD)	
July 15-16	Hazardous Waste Management for Research Laboratories and Universities
August 17	Evaluating Environmental Impact Reports for Water and Air Quality, with Emphasis on Toxics
September 25 *	Toxic and Hazardous Chemicals -- How to Evaluate the Experts
September 15	Hazardous Materials Management for Small and Medium Size Firms
September 10 (tentative)	Legislative Update (repeat)
FAII 1982	(tentative)

FALL 1982

- ? Disposal of Infectious Disease Wastes from Hospitals
- ? Monitoring Groundwater Quality for Toxic Chemicals

*low fee weekend citizen workshop



The Toxic and Hazardous Substances Program

Developing Hazardous Materials Management Plans

This one-day workshop will cover practical information and techniques to help city and county governments develop comprehensive hazardous materials management plans. The workshop will address the legal, technical, education and health aspects of the process, including the elements of a plan; survey; enforcement; plan development; response; citizen participation; impacts and relationships to land use planning; and the probable roles of state and local jurisdictions.

INSTRUCTOR: Allen Ferrari, M.P.A., chief of environmental health, Yolo County. Ferrari headed a task force that developed Yolo County's hazardous materials management plan, one of the first in the state. Guest speakers will include representatives of state and local agencies.

IN NORTHERN CALIFORNIA: 9 a.m.-4 p.m. (registration: 8:30 a.m.), Friday, April 23; 1 meeting / MUII, Memorial Union, UC Davis campus / Fee: \$50 / Enroll in Section 8814K01-0 by April 16. Limited enrollment. / Non-credit only.

IN SOUTHERN CALIFORNIA: 9 a.m.-4:30 p.m. (registration: 8:30 a.m.), Friday May 14; 1 meeting / Garden Grove Community Meeting Center, 113000 Starford Avenue, Garden Grove / Fee: \$65 (includes lunch) / Enroll in Engr. 849 EDP W139. / Non-credit only.

University Extension, University of California • Davis and Irvine Campuses
Program Coordinator: Yvonne L. Hunter, telephone (916) 758-0880

Chemicals of Current Interest

This series of afternoon lectures focuses on the toxicology and chemistry of the following four major chemical groups and the controversial chemicals in each: fumigants (ethylene dibromide), organophosphates (malathion, parathion), organohalogens (PCB, toxafene, DDT), and phenoxy herbicides (2,4-D; 2,4,5-T). The lectures will explore the varying opinions regarding the potential health effects of each group and how regulations for their control are developed. Each lecture will be followed by panels commenting on the presentation and by questions from the audience.

COURSE COORDINATOR: Ray Fleck, Ph.D., director of the Center for Food Protection and Toxicology, UCD

SPEAKERS: Roy Fukuto, professor of entomology, UC Riverside; Steven Rappaport, assistant professor of biomedical and environmental health sciences, UC Berkeley; and Lee Shull, assistant professor of environmental toxicology, UCD.

IN NORTHERN CALIFORNIA: Wednesdays, 1:30-4 p.m. (registration at 1 p.m.), May 5-26; 4 meetings / Cypress Room, University Extension Sacramento Center, 5th and L Streets (east of Macy's), Sacramento / Fee: \$60 / Enroll in Section 8814K02-0 by April 27; limited enrollment. Non-credit only.

Principles of Environmental Toxicology

This one-day course is designed to provide participants with a basic understanding of toxicology. Although open to the general public, the program will be especially useful for government officials and staff members who are responsible for setting public policy regarding toxic and hazardous materials.

TOPICS: dose-response relationships; chemicals in the body; fate of pollutants in air, land and water; mutagenicity; carcinogenicity; teratogenicity; risk assessment; epidemiology; setting government standards; the use and misuse of scientific data; and predicting impacts on human health.

SPEAKERS: Wendell Kilgore and Jim Sieber, professors, environmental toxicology department, UCD; and Rhoda Wang, staff toxicologist, California Department of Food and Agriculture

COURSE COORDINATORS: Arthur Craigmill toxicologist, Cooperative Extension, and Yvonne Hunter, program coordinator, Toxic and Hazardous Substances Program, University Extension, UCD

IN NORTHERN CALIFORNIA: Tuesday, 9 a.m.-4:30 p.m. (registration: 8:30 a.m.), June 1; 1 meeting / MUII, Memorial Union Building, UC Davis campus / Fee: \$35 / Enroll in Section 8814K03-A by May 25. Limited enrollment / Non-credit only.



The Toxic and Hazardous Substances Program

Enrollment Application
Master Card or Visa accepted

To enroll in courses offered in Northern California:
Mail this application to University Extension, University of California, Davis, California 95616. If you plan to pay by Master Card or Visa, you may enroll by phone by calling (916) 752-0880.

To enroll in courses offered in Southern California:

Mail this application to University of California Extension, P.O. Box AZ, Irvine, California 92716. If you plan to pay by Master Card or Visa, you may enroll by calling (714) 833-5414.

Social Security Number*

Name: First, Middle Initial, Last

Home Address

City

State

Zip Code

Course Title

Location

Section Number

Fee

Course Title

Location

Section Number

Fee

How did you hear about this course? _____

Enclosed is my check made payable to The Regents of the University of California.

Please charge my Master Card or Visa account number: _____ Expires: _____

In accordance with the Federal Privacy Act of 1974, you are hereby notified that disclosure of your social security number is voluntary. This record-keeping system is used pursuant to the authority of The Regents of the University of California under Art. IX, Sec. 9 of the California Constitution. The social security number is used for maintenance of transcript and mail files.

You Can Have

**Substantially improved
chemical safety records...**

**Lower workers
compensation premiums...**

**Less production and profit
loss due to work site
injuries...**

**The most up-to-date
methods for handling,
storing and disposing of
hazardous chemicals...**

**You can have a custom-tailored
seminar conducted at your location.**

The J.T. Baker Hazardous Chemical Safety Seminar and Workshop can be conducted at your location for your organization. Whether you are an electronics firm with concern for highly toxic materials such as Arsine, Phosphine or Caros Acid; an industrial facility, research complex or government location, the Hazardous Chemical Safety Seminar can be tailored to meet your specific needs. For more information, contact The Office of Safety Training at (201) 454-2500.

PASS THIS ON TO—

- Research Director
- Safety Director
- Quality Control Manager

**Now available! A special course on
waste management and disposal.**

A new course in the Management and Disposal of Hazardous and Chemical Wastes is being conducted. The course deals with the Resource Conservation and Recovery Act, the practice of managing and disposing of hazardous products and the restrictions of the generator/transporter and disposal site operator. It covers storage, labeling and classification, recovery technology, waste exchange and other subjects which are vital to those responsible for the management of hazardous waste products. For information, course content and schedule, call The Office of Safety Training at (201) 454-2500.



**J.T. Baker Chemical Co.
Phillipsburg, NJ 08865**

Printed in U.S.A.

Hazardous Chemical Safety Seminar

A Two Day Program Conducted by The J.T. Baker Chemical Co.

According to the National Safety Council, one out of every 20 manufacturing and service industry employees is involved in an OSHA reportable illness or injury each year. These injuries are often related to contact with hazardous chemicals.

Based on that statistic, your organization probably lost an average of 19 workdays per injury last year. That means lower production rates, less profit, higher insurance premiums and greater scrutiny of your records by regulatory agencies.

Many of these problems can be avoided through a conscientious, continuing safety training program. If you are concerned about the safety record of your organization, the Hazardous Chemical Safety Seminar can help bring your internal program up to acceptable standards.

This two day course, developed by safety professionals and chemical researchers, will train you to:

- Recognize potential hazards
- Demonstrate correct product usage and accident prevention techniques
- Conduct your own in-house training programs

In addition, the specially prepared 275-page manual containing basic course elements and in-house training procedures is yours to keep.

This important course is now being conducted in major cities throughout the U.S. and Canada. Can you afford not to take this opportunity to strengthen your knowledge about chemical safety?



Dates & Locations

DECEMBER, 1981

3-4	Boston, MA (E)
7-8	Los Angeles, CA
9-10	Los Angeles, CA (E)
10-11	Portland, OR
14-15	San Francisco, CA
14-15	Tucson, AZ (E)
17-18	Colorado Springs, CO (E)

APRIL, 1982

1-2	Cleveland, OH
5-6	Somerville, NJ
15-16	San Diego, CA
19-20	San Francisco, CA *
21-22	Santa Clara, CA *
26-27	Houston, TX
29-30	St. Louis, MO

JANUARY, 1982

11-12	Houston, TX
14-15	Memphis, TN
18-19	Chicago, IL
21-22	Cincinnati, OH
25-26	Baltimore, MD
28-29	Somerville, NJ

MAY, 1982

3-4	Los Angeles, CA
6-7	Phoenix, AZ
10-11	Washington, DC
13-14	Buffalo, NY
17-18	Chicago, IL
20-21	Philadelphia, PA
24-25	Boston, MA (E)

FEBRUARY, 1982

1-2	Charlotte, NC
4-5	Richmond, VA
8-9	Philadelphia, PA
11-12	Pittsburgh, PA
22-23	Boston, MA
25-26	Albany, NY

JUNE, 1982

3-4	Chicago, IL (E)
7-8	Minneapolis, MN
	Raleigh, NC
10-11	Denver, CO
	Atlanta, GA
14-15	Tucson, AZ (E)
17-18	San Jose, CA (E)
21-22	Denver, CO (E)
24-25	Dallas, TX (E)

MARCH, 1982

1-2	Albuquerque, NM
4-5	Dallas, TX
8-9	Orlando, FL
11-12	Atlanta, GA
15-16	Denver, CO
18-19	Seattle, WA
22-23	St. Paul, MN #
25-26	Detroit, MI
29-30	Baltimore, MD

(E) Special courses for the electronics industry.

Sponsored by the Minnesota Safety Council

* Co-sponsored by the Safety Councils of San Francisco, San Mateo, Central Counties

Agenda

First Day

8:30 a.m. Registration
9:00 a.m. Introduction—Hazard Analysis
9:15 a.m. Fundamentals of Hazardous Chemical Safety Defining Potentially Hazardous Situations
 Refreshment Break
10:00 a.m. Flammable Liquids and Solids
12:00 noon Lunch
1:15 p.m. Flammable Materials Workshop—
 Vapor Phase Explosions, Static Electricity, Flash Point Determination, Grounding Equipment
2:30 p.m. Corrosive Chemicals
 Refreshment Break
3:30 p.m. Eye and Face Protection and Shielding
3:45 p.m. Corrosive Chemicals Workshop—
 Chemical Burn Treatment, the "Egg Test," Acid Spill Control, Corrosion Testing
4:30 p.m. Closing and Group Discussion

Second Day

8:30 a.m. Insidious Hazards
9:45 a.m. Toxic Chemicals
 Refreshment Break
10:30 a.m. Chemical Storage-Building Design, Ventilation, Safety Cabinets, Effective Separation of Incompatible Materials
11:30 a.m. Sources of Information-Technical Data, The Safety Library, OSHA Form 20, NFPA
12:00 noon Lunch
1:00 p.m. Chemical Waste Disposal-Resource Conservation and Recovery Act
1:45 p.m. Cryogenic Liquids and Compressed Gases
 Refreshment Break
3:00 p.m. The Safety Audit, Labeling
3:30 p.m. First Aid, Responses to Emergency Situations, Decontamination, Emergency Equipment
4:00 p.m. Summary

Who Should Attend

The course is designed for people in either staff or line management positions who have responsibility for maintaining standards of safety and conducting safety training.

Industry—Safety Managers, Scientists, Lab Managers, Production Supervisors, Storeroom Personnel, Firefighters, Hygienists, Insurance Underwriters, Loss Control Managers

Education—Chemistry Department Chairpersons, Storeroom Personnel, Researchers

Clinical—Lab Supervisors, Medical Technicians, Safety Directors

Government—Scientists, Engineers, Training Managers, Regulatory Agency Inspectors

Course Instruction

The teaching staff are all professional chemists with a variety of disciplinary backgrounds. Each brings a special expertise and his or her own personal

teaching methods to the lecture periods and demonstration workshops.

Professional Faculty

Dr. J.J. Bulloff—Rensselaer Polytechnic Institute
Mr. Joseph Dinnin—U.S. Geological Survey
Dr. Natalie Foster—Lehigh University
Dr. W. Carl Gottschall—University of Denver
Dr. Stephen Hall—Southern Illinois University (Edwardsville)
Dr. Wayne Harrington—Vanderbilt University
Dr. Ned Heindel—Lehigh University
Dr. H.R. Jones—Johns Hopkins University
Mr. Warren Kingsley—J.T. Baker Chemical Company
Dr. Neal Langerman—Utah State University
Dr. Robert Miner—Princeton University
Dr. Margaret Rea—Tufts University
Mrs. Eileen Segal—Boston University
Dr. Mayo Smith—University of Maryland
Dr. J.R. Williamson—Eastern Michigan University
Dr. Jay Young—University of Notre Dame

Registration Information

Accommodations

Rooms are set aside at conveniently located hotels and registrants are responsible for their own reservations. When contacting the hotel for reservations, please indicate that you will be attending the seminar.

Fee

The single registration fee of \$300 includes the 275-page manual and two lunches.

Multiple registrations from a single organization will be discounted as follows:

2nd, 3rd attendees - \$275 each
additional attendees - \$230 each

Cancellations and Transfers

Persons giving notice of cancellation SEVEN (7) DAYS prior to the first day of the scheduled seminar will receive a full refund. No refunds can be made for cancellations received after that date. Registration fees not received from registrants who cancel their registration less than SEVEN (7) DAYS prior to the seminar will be invoiced, in addition to a surcharge of 10%. Substitutions for an individual previously registered may be made without notification.

Registration

Enrollment is limited to 50 people. To assure a space, please notify the Office of Safety Training by calling (201) 454-2500. The completed registration form and check, a purchase order or voucher number should be sent to: Carol Morris

J.T.Baker Chemical Co.
Phillipsburg, NJ 08865

Checks should be made payable to: J.T.Baker Chemical Company. Classes fill fast. So send in your reservation form today.

Complete information will be forwarded to you approximately 2-3 weeks prior to the scheduled seminar.

REGISTRATION— Enrollments are limited. The registration form and check, purchase order or voucher should be sent to: Carol Morris at the J.T.Baker Chemical Co., Phillipsburg, NJ 08865. Checks should be made payable to: J.T.Baker Chemical Co.

The Hazardous Chemical Safety Seminar & Workshop

PLEASE STAPLE YOUR CHECK TO THIS FORM.

INDICATE SEMINAR CITY _____

NAME _____

COMPANY/ORGANIZATION _____

ADDRESS _____

STATE _____

SEMINAR DATE _____

TITLE _____

TELEPHONE (AC) _____

CITY _____

ZIP _____

FOR INTERNAL USE ONLY

Check No. _____
Amount _____
Date _____

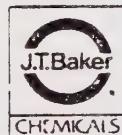




**J. T. Baker
Management and
Disposal of
Hazardous and
Chemical Wastes**

A course on Hazardous Chemical Safety is conducted in major cities.

For course content information and schedule of cities in which the course will be conducted, contact the Office of Safety Training, (201) 454-2500



J. T. Baker Chemical Co.
222 Red School Lane
Phillipsburg, NJ 08865

**A Seminar on
Management and
Disposal of
Hazardous and
Chemical Wastes**

an experienced and practical approach by
J.T. Baker Chemical



Seminar Schedule First Day

MORNING SESSION (9:00 a.m. to 12 Noon)

- **Introduction**—Discussion of seminar objectives and waste management problems each attendee has encountered.
- **History of the Industry**—Analysis of the history of the waste generation and disposal industry, society's attitudes, past disposal practices that led to RCRA regulation and discussion of typical disposal operations that should be avoided.
- **RCRA Overview**—Status of regulations and overview of applicable sections, state programs and their implementation.
- **Identification and Listing**—How to identify hazardous wastes, hazardous waste characteristics, who is a generator and exempted activities.

Lunch (12 Noon to 1 p.m.)

MORNING SESSION (8:30 a.m. to 12 Noon)

- **Generator Standards**—Responsibilities of generators, requirements and use of the manifest system, recordkeeping and reporting requirements, marking and labeling of hazardous waste containers and packages, cradle to grave responsibility.
- **Transporter Standards**—Compliance with manifest system, delivery to permitted facilities, recordkeeping and reporting requirements, authorized vehicles, spill cleanup responsibilities.
- **Standards for Treatment, Storage and Disposal Facilities**—Interim vs. final standards, design vs. operating standards, human health and environmental standards, site selection, engineering and environmental data, disposal technology standards, contingency plan, emergency plan and personnel training requirements.
- **Permit Requirements**—Timetable for application, who is required to apply, timetable for final authorization.

Lunch (12 Noon to 1 p.m.)

AFTERNOON SESSION (1 p.m. to 4:30 p.m.)

- **In-House Waste Management**—General overview of elements necessary for development of in-house hazardous waste management programs, specific procedures and recommendations for setting up and updating the programs, how to select transporters and disposers, contract and insurance requirements, development of an informal protocol for the inspection and review of transporters and disposal sites and recommended reference library.
- **Hazardous Materials Regulations**—Review of DOT/EPA regulations on the transport of hazardous wastes and materials, training programs necessary under the law, spill procedures, fines and penalties, shipping name determination and hazard class selection, marking, labeling and placarding for transportation, selection of containers and packages, preparation of shipping papers and manifest documents, emergency response requirements.

AFTERNOON SESSION (1 p.m. to 4:30 p.m.)

- **Storage and Classification**—Container and package selection, coding system, inventory control, purchasing procedures, shelf-life, expiration date, peroxidizable compound storage, inter-reactivity categorization of hazardous wastes, CHRIS compatibility guide.
- **Superfund**—The Comprehensive Environmental Response, Compensation and Liability Act of 1980, discussion of liability and taxes imposed.
- **Disposal Technologies**—Detailed review of cost and methods of disposal for various waste streams. Technologies covered include BTU recovery, solvent recovery, incineration, chemical treatment, landfilling, solidification, etc.
- **Resource Recovery**—Clearinghouses, materials and waste exchanges, methodology selection procedures, practical examples, future technology.
- **Special Disposal Problems**—Asbestos, marking, labeling, packaging, and disposal methods, PCB's, timetables for storage and disposal, innovative storage techniques, disposal technology present and future. **High Reactive Materials**: chemical categories, in-house management procedures, explosive thermal decomposition, detonation, specialized portable equipment.

COURSE INSTRUCTORS:

- Dr. Jack J. Bulloff—Rensselaer Polytechnic Institute
- Dr. Stephen K. Hall—Southern Illinois University (Edwardsville)
- Dr. Neal R. Langerman—Utah State University
- Mr. John F. McMaster—Southern Illinois University (Carbondale)
- Mr. Thomas L. Moran—Advanced Environmental Technology Corp
- Mr. Larry A. Parker P.E.—Larry A. Parker & Associates Inc
- Mr. Robert T. Quayle Jr.—Luning University

REGISTRATION FORM

-37-

PREMIER OXFORD PUBLICAN ASSOCIATION LTD. 1960

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HOW TO REDESIGN

The following items are a few of the topics discussed:

A Two-Day Course

hazardous waste management and disposal is a subject of vital importance today. And now **ITT** **Baier Chemical Company**, a leading manufacturer of specialty chemicals, has developed an important seminar on the management and disposal of hazardous wastes. This 1½-day seminar, **ITT** **Baier** will share its expertise with you... and offer you valuable insight and information.

The Objectives

Participants will receive a comprehensive guide to the course. This manual will serve as a valuable reference along with other tools and materials provided to the attendee, such as slides, handouts, and other course materials.

Where? Currently courses are offered at various locations throughout the county (See our list of cities and locations for a city near you) A 6. PCs and highly reactive materials that are regulated by other environmental legislation

What? War exchanges, information clearing houses onsite recover new technology houses

Existing disposal sites and technologies as they apply to specific waste streams. Discussed are specific secure chemical landfills, incinerators, acidic/alkaline neutralization facilities, aqueous and chemical treatment sites, solvent recovery solvent/fuel (BLU) recovery, burning sites, deep well injection.

FEBRUARY 1982		MARCH 1982	
1-2	New Orleans, LA	11-12	San Diego, CA
4-5	Memphis, TN	18-19	Providence, RI
6-9	Denver, CO	25-26	Philadelphia, PA
11-12			
13-14			

APRIL 1982		JULY 1982	
1.2	Las Vegas, NV	22.23	Detroit, MI
4.5	Phoenix, AZ	26.27	Charleston, SC
8.6	Peoria, IL	29.30	Bulldozer, NY
11.12	Washington, DC		
11.12	Seattle, WA		
15.16	Boston, MA	12.13	Newark, NJ
18.19	Cleveland, OH	15.16	Albany, NY
22.23	Jacksonville, FL	19-20	Portland, OR
26.27	Rehoboth, NC		
29.30	Seattle, WA		
1.2	Atlanta, GA	3.4	Philadelphia, PA
4.5	Dallas, TX	7.5	Denver, CO
8.6	Fl. Worth, TX	10.11	Phoenix, AZ
11.12	Chicago, IL	14-15	Minneapolis, MN
11.12	Laudington, KY	St. Paul, MN	

Dates & Locations

NOTE: Treasury Regulation 1.162-5 permits an income tax deduction for educational expenses to include registration fees, cost of travel, meals and lodging undertaken to maintain or improve skills required in one's employment or other trade or business.

Cancellations received SEVEN (7) days prior to the first day of the scheduled seminar will receive refunds in full. No refunds can be made for cancellations received after this day, tuition fees not received from registrants who cancel their registration less than seven (7) days prior to the seminar will be incurred. Full information will be sent to you approximately 2-3 weeks before the scheduled seminar.

Registration Enrollment is limited. To assure enrollment, please notify the Office of Safety Training by telephone (201) 454-2500, complete the registration form and mail. To confirm your enrollment, the registration form MUST be accompanied by a check, purchase order or money order.

Multiple registrations from a single organization will be discounted. For more information, please call the Office of Safety Training (201) 454-2500.

Transfer Substitutions for an individual previously registered

Transportation requirements (DOT/EPA) for hazardous wastes including State and Federal waste tracking manifests, drum labeling and marking, shipping documents, mandatory training programs, container placarding and lines.

insurance and legal requirements imposed by RCRA

Practical establishment of in-house waste management control programs including layout of J.S.A. safety guides on chemical storage and chemical inter-reactivity.

CB's and highly reactive materials that are regulated by other environmental legislation.

existing disposal sites and technologies as they apply to specific waste streams. Disposal sites are specific secure chemical landfills, incinerators, acidic/alkaline neutralization laboratories, aqueous and chemical treatment facilities, solvent recovery/solvent/fuel recovery, burning sites, deep well injection.

FEDERAL EMERGENCY MANAGEMENT AGENCY

Schedule of Courses

October-December 1981

October

14-16 FEMA National Security Training Workshop (nomination by FEMA Headquarters)

12-23 Career Development in Emergency Management, Phase III Course

19-30 Fallout Shelter Analysis Course

26-30 Radiological Emergency Planning Course

November

2-6 Radiological Accident Assessment Course

2-6 Disaster Training in Public Assistance (nomination by FEMA Headquarters and Regions)

16-18 Intergovernmental Relations Seminar (nomination by FEMA Headquarters)

16-20 Department of Energy (DOE) Continuity of Government Course (DOE nomination)

30-Dec 4 Flood Hazard Mitigation Workshop (nomination by FEMA Headquarters and Regions)

December

7-11 Disaster Training in Individual Assistance (nomination by FEMA Headquarters and Regions)

7-18 Career Development in Emergency Management, Phase IV Course

14-18 FEMA Professional Development Seminar (open to FEMA Headquarters and Regional personnel)

COURSE DESCRIPTIONS

1. FEMA National Security Training Workshop (October 14-16)

A three-day workshop for selected FEMA staff in the National Security areas to develop coordinated guidance, establish priorities, and suggest specific training activities for meeting training needs at the national level in mobilization, continuity of government (COG), resource management, civil defense, and consequences of terrorism.

2. Career Development in Emergency Management: Phase III - The Personal Effectiveness of the Emergency Management Coordinator (October 12-23)

A two-week course designed for local and State emergency managers and responders, covering leadership and managerial improvement; communicating with superiors, staff, other officials, and the public; and functioning within a community structure. The course is open to those who have completed Phases I and II in the series. (Phases I and II are offered through FEMA's regional training programs.)

3. Fallout Shelter Analysis Course (October 19-30)

The Fallout shelter Analysis Course provides instruction on advanced methods enabling architects and engineers to determine the protection that structures will provide against fallout radiation from nuclear weapons. The course emphasis is on sophisticated quantitative methods of shelter analysis including computer assisted procedures. Supporting topics cover effects of nuclear weapons; shelter design techniques; criteria and environmental considerations; related federal policies and programs; and an introduction to protective design of shelters.

4. Radiological Emergency Planning Course (October 26-30)

A one-week course for Federal, State, local and utilities personnel involved in REP planning. Includes discussion of issues and implementation of the Federal regulatory policies and guidance, and provides a forum for the exchange and sharing of skills, knowledge, and experiences related to REP planning, exercises, and the public. This course addresses nuclear power plant off-site REP requirements.

5. Radiological Accident Assessment Course (November 2-6)

A one-week course designed for persons responsible for helping assess the radiological consequences to the public following an accidental release of radioactivity from a nuclear facility, and for recommending protective actions. This is a technical course requiring a knowledge of algebra, including logarithmic and exponential manipulations; familiarity with radiological terms and radiation protection concepts; and a general knowledge of Health Physics. Although designed for State radiological emergency response coordinators and their radiological health staffs, nuclear facility health physics personnel responsible for radiological emergency response and local radiological officials may also qualify for the course if they have accident assessment responsibilities.

6. Disaster Training in Public Assistance (November 2-6)

A one-week course designed for FEMA permanent full-time, temporary employees, and disaster reservists nominated by the FEMA Regional Director. Other FEMA and Federal representatives may also attend on invitation by the Office of Disaster Response and Recovery. The scope of the course includes an overview of the Public Assistance Program, stressing the "specialized" skill areas needed to successfully operate the program at the Disaster Field Office.

7. Intergovernmental Relations Seminar (November 16-18)

Quarterly three-day seminars will provide a forum for the exchange of information between FEMA program offices and selected Federal, State, and local constituents. Topical subjects will be related to issues of importance to FEMA and the specific constituencies and will vary with each seminar.

8. Department of Energy (DOE) Continuity of Government Course (November 16-20)

This three-day seminar for personnel designated by the Department of Energy (DOE) will place emphasis on reviewing and discussing continuity of government (COG) policies, plans, responsibilities, and implementation of procedures for COG actions. Topics will include successor capability, communications, delegation of emergency authorities, safekeeping of essential records, utilization of data bases, and linkages with State and local government.

9. Flood Hazard Mitigation Workshop (November 30-December 4)

A one-week workshop for Federal, State and local hazard mitigation teams designated under the Interagency Agreement. The workshop will provide training in the flood hazard mitigation guidelines developed for the teams.

10. Disaster Training in Individual Assistance (December 7-11)

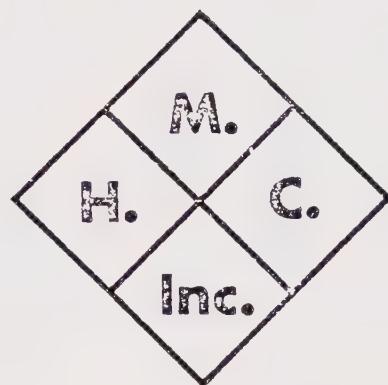
A one-week course designed for FEMA permanent full-time, temporary employees, and disaster reservists nominated by the FEMA Regional Director. Other FEMA and Federal representatives may also attend on invitation by the DR&R National Office. The scope of the course includes an overview of the Public Assistance Program, stressing the "specialized" skill areas needed to successfully operate the program at the Disaster Field Office.

11. Career Development in Emergency Management: Phase IV - Emergency Management in National Security (December 7-18)

A two-week course designed to give local and State emergency managers and policy makers perspectives on national programs of the Federal Emergency Management Agency; the role of civil defense of the U.S. and other nations; military and nonmilitary defense posture; the international situation; emergency management relationships between Federal-State-local government; and emergency response to crisis situations.

12. FEMA Professional Development Seminar (December 14-18)

A one-week professional development seminar for FEMA personnel. The seminar topics will be derived from a national survey of key FEMA staff in combination with activities to generate broader awareness among participants about FEMA programs and needs. Participants will develop skills and an information base which should enhance their ability to function in their professional roles and in other organizational development activities.



**HAZARDOUS MATERIALS
CONSULTANTS, INC.**

620 W. Sixth St., Suite A
Corona, CA 91720
(714) 371-1180

Services Provided

Services to Private Industry

- Observation of present practices of transportation, storage, handling, and use of hazardous materials.
- Recommendations to improve present methods of hazardous materials management.
- Interpretation of CFR 49 requirements for compliance.
- Training for and administration of the Federal Motor Carrier Driver Safety Test.
- Field inspection to assure compliance with CFR 49 and Motor Carrier Safety Regulations.
- Development of detailed spill contingency plans.
- Emergency response team training for in-house spills.
- Design of individualized training programs for key employees.
- Recommendations for assembly of special protective gear and equipment essential to safety when dealing with hazardous materials.
- Hazardous waste management to comply with requirements of Title 40 Code of Federal Regulations, and Title 22 of the California Administrative Code.

Our consultants include individuals with a broad range of experience and expertise related to hazardous materials. Their areas of expertise include, but are not limited to, spills, environmental and interpretation of regulations pertaining to transportation, research analysis, training programs, development and professional training.

We offer a wide range of services designed toward ensuring safety, the protection, and keeping your firm in compliance with federal and state requirements concerning the proper transportation, handling, use and disposal of hazardous materials.

Services to Public Agencies

(Police, Fire, and Public Works)

- Hazardous Materials Consultants, Inc. can be of assistance to any business or public agency involved in the shipping, transportation, storage, use, or disposal of hazardous materials as defined in Title 49 of the Code of Federal Regulations (CFR 49).

Benefits of Programs

Our services are designed to:

- Maximize employee and public safety.
- Be cost effective.
- Help prevent most accidents and spills.
- Help contain and control spills that do occur.
- Limit the need for expensive outside clean-up contractors.
- Keep your company in compliance with federal and state hazardous materials regulations.
- Avoid high fines for non-compliance with federal and state regulations.
- Maintain a positive community image and avoid adverse publicity.
- Maintain good insurance rates and coverage.
- Avoid production shutdowns or delays due to hazardous materials incidents.

RCRA TITLE 40

CAC Title 22

Standards applicable to generators:

- Packaging/Labeling/Markings
- Waste hauler qualifications/verified
- Use of the manifest system
- Facility equipment
- Preparedness and prevention
- Contingency plan and emergency procedures
- Personnel training
- Arrangements with local authorities
- Record keeping

Standards applicable to transporters:

- Compliance with manifest
- Placarding requirements
- Immediate action after discharge
- Discharge clean-up
- Record keeping
- Driver Training (Parts 390-397 FMCSR)

Services to Public Agencies

(Police, Fire, and Public Works)

- Hazardous Materials Awareness Training
- Contingency Plans for Hazardous Materials Incidents emphasizing personal and public safety.
- Command Post Responsibilities including: Notification of appropriate agencies and effective Press Relations.
- Enforcement recommendations for CFR 49 and other applicable Federal and State regulations.
- Response and Spill Scene Management including: Preliminary Identification techniques and basic Containment and Control Procedures.
- Emergency Response Team Training and Emergency Response Unit (ERU) design.

Benefits of Programs

Our services are designed to:

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- Be cost effective.
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- Help contain and control spills that do occur.
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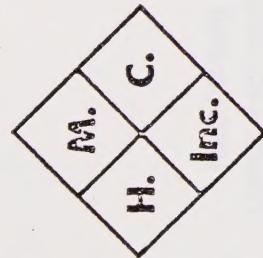
SEMINAR SCHEDULE

TUESDAY, APRIL 27, 1982

This seminar is directed at law enforcement personnel who have the authority to stop and inspect hazardous materials transport vehicles.

It will feature applicable laws in a clear, concise language accompanied by actual field experience and photographs.

Many seminars have been directed at "AWARENESS" of hazardous materials. This seminar will emphasize "ENFORCEMENT" during pre-accident transportation as well as after the incident or accident has occurred.



HAZARDOUS MATERIALS CONSULTANTS, INC.

PRESENTS

ENFORCEMENT OF

HAZARDOUS MATERIALS RULES AND REGULATIONS

CFR 49
TITLE 13

PERSONS THAT WILL BENEFIT ATTENDING THIS SEMINAR

- Commercial Vehicle Supervisors
- Commercial Vehicle Officers
- Motor Carrier Personnel
- Traffic Sergeants
- Traffic Officers
- Training Supervisors
- Training Officers
- Trucking Safety Personnel
- Labels & Markings
- Hazardous Waste Transportation
- Loading Requirements
- Break
- Shipping Papers
- Vehicle Equipment
- Applicable Laws
- Placarding
- Dot Guidebook
- Haz. Mat. License Requirements
- Officer Safety
- Test & Critique

ABOUT THE INSTRUCTORS

KEITH WALSH

- Former Sergeant, California Highway Patrol
- Authority on Enforcement of CFR 49
- Authority on CFR 40 and CAC 22
- Conducted extensive training of Law Enforcement Personnel

GENERAL INFORMATION

APRIL 27, 1982

LOCATION:

Pomona Elks Lodge
1471 W. Holt Ave.
Pomona, Ca

TIME:

9 a.m. to 4 p.m.
Tuesday, April 27, 1982

FEES:

\$55.00 per person. This
includes coffee, lunch
and all instructional
materials.

R.A. MACCAMBER

- Lecturer and consultant on hazardous Materials
- Instructor at Regional Police Academy
- Conducted training for Hazardous Materials Transportation personnel
- Authority on CFR 40 and CAC Title 22

SPECIALIZED TECHNOLOGY AND RESOURCES FOR CHEMICAL EMERGENCIES

This is a rare opportunity for you! HMC, Inc and Phenix Technology have joined together to produce a 1 day school on the subject of how to be better prepared to cope with your hazardous material problem. The course is quite a bit different than any you may have already attended.

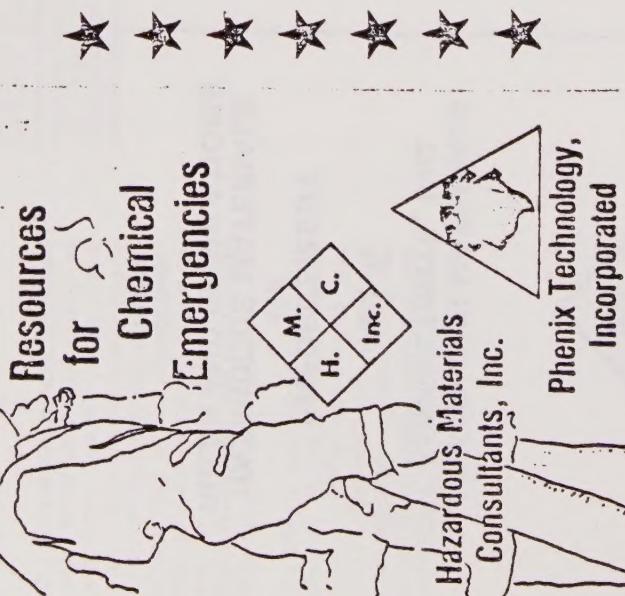
It features real life examples of how you and your organization have to deal with hazardous material problems when the spectacular accident has not happened yet.

STAR features such subjects as how to inspect a cargo truck for compliance with State and Federal regulations on Hazardous Material Transportation. It answers such questions as how should Hazardous Material Waste be disposed of; it focuses on the problems of how to locate, remove and resolve the problems of an underground gasoline leak.

In short, STAR is not a retread of any course you may have attended. It's new! It's designed for field personnel and those responsible for planning for emergencies. Be a STAR yourself and join us on January 23, 1982.

S T A R

Specialized Technology and Resources for Chemical Emergencies



THE CLASS SCHEDULE

- 0830: Registration, Introduction, Pre-Test
- 0845: Organizational Interface of Agencies involved in Hazardous Materials Regulations
- 0915: References, Resources Information
- 1015: Over the Road Enforcement Problems
- 1200: Lunch
- 1230: Field Demonstration
- 1315: Evacuation & Contingency Planning
- 1415: Command & Control Theory & Operation
- 1500: Underground Spills & Leaks
- 1530: Instrumentation & Technology for Identifying Materials
- 1600: Handling The Media
- 1630: Evaluation & Post Test

GENERAL INFORMATION

Location: This course will be taught at the Elks Lodge, located at 212 S. Elk Lane in Santa Ana, CA. Parking is conveniently located right next door behind the Saddleback Inn on 1st Street.

Time: The course will be starting at 8:30 A.M. on January 23, 1982. It will end at 4:30 that afternoon.

Fee: The fee is \$67.50 per person. This includes coffee, lunch and all instructional materials.

Refunds: If the program is cancelled for any reason you will receive a complete refund. If you cancel, you must notify us before January 20, 1982 to be entitled to a refund.

WHO SHOULD BE ATTENDING THIS COURSE?

- Traffic Enforcement Officers
- Fire Company Officers
- Law Enforcement Field Supervisors
- Fire Inspectors
- Fire Dept. Training Officers
- Fire Marshals
- Civil Defense Directors
- Fire Dept. Training Officers
- Industrial Safety Personnel
- Trucking Industry Personnel
- Health Office Personnel

ABOUT THE INSTRUCTORS

Ken York

- Former Emergency Response Manager, IT Corp.
- Responded to over 475 Hazardous Materials incidents
- Nationally recognized expert in Emergency Response
- Popular Instructor at Regional State Academies

Keith Walsh

- Former Sergeant, California Hwy. Patrol
- Authority on Enforcement of Hazardous Material Regulation
- Authority on Title 22 Hazardous Material Waste, Title 40, CFR
- Conducted extensive training of law enforcement personnel
- Ron Coleman
- Textbook author on Emergency Operation
- Consultant on Contingency Planning for Hazardous Materials
- Lecturer and Consultant on Hazardous Materials
- Equipment Designer for firefighter safety

Hazardous Materials And The Driver



Hazardous Materials may be offered for shipment in either package or bulk form.

CFR 49 defines a hazardous material as "a substance or material which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce,"

If your company either occasionally or frequently transports hazardous materials, Federal law requires that your drivers be trained in Hazardous Materials Regulations contained in the Code of Federal Regulations Title 49, (CFR 49).

Due to the complexity of these regulations and to time and logistical constraints, drivers often receive only minimal instructions.

With these facts in mind, Hazardous Materials Consultants, Inc., Corona, California, has designed and developed a clear, concise 16 minute, 77 slide sound synchronized training program entitled HAZARDOUS MATERIALS And The Driver. In addition to the audio-visual component, the training package also includes a printed script and a pre and post test with answer key. These tests will help you assess your employees' knowledge and learning and will be a valuable addition to their personnel file. In 30 minutes or less you can provide comprehensive hazardous materials training for your drivers. This program is immediately available. ORDER NOW

Please send _____ HAZARDOUS MATERIALS AND THE DRIVER complete programs at \$175.00
Additional cassette tapes available on request @\$29.95.

TOTAL REMITTED _____ BILL US

Make checks payable to HAZARDOUS MATERIALS CONSULTANTS, INC.

Company Name _____

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PERSON ORDERING _____

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If remittance accompanies order, shipping charges will be paid by HMC, INC. Calif. firms add 6% state sales tax. HAZARDOUS MATERIALS CONSULTANTS, INC., 620 West Sixth Street, Corona, California 91720 — (714) 371-1180.

